CLAIMS

I claim:

1. An electrical terminal, comprising:

(a) a crimp flange having a pair of upwardly and outwardly flared opposite side portions and an arcuate-shaped bottom portion extending between and interconnecting said side portions;

(b) at least one insulation piercing knife connected to said crimp flange and being cutout and bent upwardly from said bottom portion and disposed interiorly of said side portions thereof such that an end of an insulated conductor can be placed between said side portions of said crimp flange and over said piercing knife and said crimp flange crimped onto the insulated conductor end by bending said side portions of said crimp flange toward one another over and downwardly toward the insulated conductor end whereupon said side portions of said crimp flange press the insulated conductor end downwardly upon said piercing knife which pierces and displaces insulation of the insulated conductor end and makes a substantially gas-tight electrical connection with an electrical wire within the insulated conductor; and

(c) a blade connected to said crimp flange and extending therefrom for insertion into an external electrical socket for making an electrical connection with a contact thereof.

2. The terminal of Claim 1 wherein said at least one insulation piercing knife is a pair of insulation piercing knives cutout and bent upwardly from said bottom portion of said crimp flange and disposed interiorly of said side portions thereof.

3. The terminal of Claim 2 wherein said insulation piercing knives are disposed substantially in an end-to-end tandem alignment with one another.

4. The terminal of Claim 1 wherein said blade includes a web portion connected to said crimp flange and having a plurality of undulations formed along opposite sides of said web portion so as to define lance-formed barbs which are capable of abutting against a plug housing and preventing removal of said electrical terminal therefrom.

5. An electrical plug assembly, comprising:

(a) a plug housing having opposite ends and defining a pair of spaced apart channels therethrough open at each of said opposite ends thereof;

(b) a pair of insulated conductors each having an end and an electrical wire and a layer of insulation covering said wire and being disposed at least partially within one of said channels of said plug housing; and

(c) a pair of electrical terminals each being insertable into one of said channels of said plug housing at one of said opposite ends of said plug housing, each said terminal including

(i) a crimp flange having a pair of upwardly and outwardly flared opposite side portions and an arcuate-shaped bottom portion extending and interconnecting said side portions,

(ii) at least one insulation piercing knife connected to said crimp flange and being cutout and bent upwardly from said bottom portion and disposed interiorly of said side portions thereof such that said end of said insulated conductor can be placed between said side portions of said crimp flange and over said piercing knife and said crimp flange crimped onto said insulated conductor end by bending said side portions of said crimp flange toward one another over and downwardly toward said insulated conductor end whereupon said side portions of said crimp flange press said insulated conductor end downwardly upon said piercing knife which pierces and displaces said insulation of said

insulated conductor end and makes a substantially gas-tight electrical connection with said electrical wire of said insulated conductor, and

(iii) a blade connected to said crimp flange and extending therefrom for insertion into an external electrical socket for making an electrical connection with a contact thereof.

6. The assembly of Claim 5 wherein said housing has a one-piece construction.

7. The assembly of Claim 5 wherein each of said electrical terminal has a one-piece construction.

8. The assembly of Claim 5 wherein:

said electrical terminal has opposite ends; and

said crimp flange of said electrical terminal is disposed at a rearward position on said electrical terminal adjacent to one of said opposite ends thereof.

9. The assembly of Claim 8 wherein said blade of said electrical terminal is disposed at a forward position on said electrical terminal opposite from said crimp flange and adjacent to the other of said opposite ends of said electrical terminal and extending therefrom toward but spaced from said one opposite end of said electrical terminal.

10. The assembly of Claim 5 wherein said at least one insulation piercing knife of said electrical terminal is a pair of insulation piercing knives cutout and bent upwardly from said bottom portion of said crimp flange of said electrical terminal and disposed interiorly of said side portions of said crimp flange of said electrical terminal.

11. The terminal of Claim 10 wherein said insulation

piercing knives are disposed substantially in an end-to-end tandem alignment with one another.

12. The terminal of Claim 5 wherein said blade includes a web portion connected to said crimp flange and having a plurality of undulations formed along opposite sides of said web portion so as to define lance-formed barbs which are capable of abutting against said plug housing and preventing removal of said electrical terminal by being pulled back through said one channel and therefrom after said insulated conductor end and said electrical terminal have been inserted into said one channel of said plug housing.

13. A method of making a plug assembly, said method comprising the steps of:

(a) providing a plurality of electrical terminals on a strip;

(b) passing a pair of insulated conductors through channels of at least one plug housing such that separate portions of each of the insulated conductors extend from opposite ends of the plug housing;

(c) aligning ends of the electrical terminals with the portions of the insulated conductors which extend from one of the opposite ends of the plug housing;

(d) removing the strip interconnecting the electrical terminals;

(e) crimping the electrical terminals on the ends of the insulated conductors such that insulation on the insulated conductors is penetrated and electrical connections are made between the electrical terminals and electrical wires within the ends of the insulated conductors; and

(f) securing the crimped electrical terminals on the insulated conductor ends within the channels of the plug housing.

14. The method of Claim 13 further comprising:

providing each of the electrical terminals with a crimp flange, at least one insulation piercing knife connected to the crimp flange and a blade connected to the crimp flange for insertion into an external electrical socket for making an electrical connection with a contact thereof, the crimp flange having a pair of upwardly and outwardly flared opposite side portions and an arcuate-shaped bottom portion extending between and interconnecting the side portions, the knife being cutout and bent upwardly from the bottom portion of the crimp flange and disposed interiorly of the side portions of the crimp flange such that the end of the insulated conductor can be placed between the side portions of the crimp flange and over the piercing knife whereupon prior to insertion of the electrical terminal into the respective one of the channels of the plug housing the crimp flange is crimped onto the insulated conductor end by bending the side portions of the crimp flange toward one another over and downwardly toward the insulated conductor end such that the side portions of the crimp flange press the insulated conductor end downwardly upon the piercing knife which pierces and displaces insulation of the insulated conductor end and makes a substantially gas tight electrical connection with an electrical wire of the insulated conductor and such that after crimping the crimp flange the electrical terminal may be inserted into the channel of the plug housing at the one of opposite ends of the plug housing to a point spaced interiorly from the other of the opposite ends of the plug housing.

15. The method of Claim 14 wherein said electrical terminal is provided with a pair of insulation piercing knives cutout and bent upwardly from the bottom portion of the crimp flange and disposed interiorly of the side portions of the crimp flange of the electrical terminal.

16. The method of Claim 15 wherein said insulation piercing knives are provided substantially in an end-to-end tandem alignment with one another.

17. The method of Claim 14 wherein the blade of the electrical terminal is provided with a web portion connected to the crimp flange and having a plurality of undulations formed along opposite sides of the web portion so as to define lance-formed barbs which abut against the plug housing and prevent removal of the electrical terminal by being pulled back through the one channel and therefrom after the insulated conductor end and the electrical terminal have been inserted into the one channel of the plug housing.

18. The method of Claim 13 wherein said removing the strip occurs concurrently with said crimping the electrical terminals.

19. The method of Claim 13 wherein said removing the strip occurs after said crimping the electrical terminals.

20. The method of Claim 13 wherein said removing the strip occurs before said crimping the electrical terminals.